



SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: NEBOJSA JANJIC, LARRY GOLD, PAUL G. SCHMIDT, CHANDRA VARGESE, MICHAEL WILLIS
- (ii) TITLE OF THE INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) NUCLEIC ACID LIGAND COMPLEXES
- (iii) NUMBER OF SEQUENCES: 88
- (iv) CORRESPONDENCE ADDRESS:
- (A) ADDRESSEE: Swanson and Bratschun, L.L.C.
 - (B) STREET: 8400 East Prentice Avenue, Suite #200
 - (C) CITY: Denver
 - (D) STATE: Colorado
 - (E) COUNTRY: USA
 - (F) ZIP: 80111

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Diskette, 3.5 inch, 1.4 Mb storage
- (B) COMPUTER: IBM compatible
- (C) OPERATING SYSTEM: MS-DOS
- (D) SOFTWARE: WordPerfect 6.1

(vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER: 08/897,351
- (B) FILING DATE: 21 JULY 1997
- (C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: 08/870,930
- (B) FILING DATE: 6 JUNE 1997

(viii) ATTORNEY/AGENT INFORMATION:

- (A) NAME: Barry J. Swanson
- (B) REGISTRATION NUMBER: 33,215
- (C) REFERENCE/DOCKET NUMBER: NEX61CIP

(ix) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: (303) 793-3333
- (B) TELEFAX: (303) 793-3433

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 78
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TAATACGACT CACTATAGGG AGGACGATGC GGNNNNNNNNN NNNNNNNNNN
NNNNNNNNNN NNCAGACGAC TCGCCCGA

50
78

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 88
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

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- (ii) MOLECULAR TYPE: RNA
- (ix) FEATURE:
 - (D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
TAATACGACT CACTATAGGG AGGACGATGC GGNNNNNNNNN NNNNNNNNNN 50
NNNNNNNNNN NNNNNNNNNN NNCAGACGAC TCGCCCGA 88

- (2) INFORMATION FOR SEQ ID NO: 3:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 16
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
TCGGGCGAGT CGTCTG 16

- (2) INFORMATION FOR SEQ ID NO: 4:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 32
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
TAATACGACT CACTATAGGG AGGACGATGC GG 32

- (2) INFORMATION FOR SEQ ID NO: 5:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 28
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: Nucleotides at positions 1, 6-7, 10, 14, 16-18, 20, 22, and 24-26 are 2'-fluoro (2'-F) modified
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: Nucleotides at positions 2-3, 8-9, 11-13, 15, 19, 21, 23, and 27 are 2'-OMethyl (2'-OMe) modified
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: T in position 28 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
CGGAUCAGU GAAUGCUUUAU ACAUCCGT 28

- (2) INFORMATION FOR SEQ ID NO: 6:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 28
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 1, 6-7, 10, 14, 16-18, 20, 22, and 24-26 are 2'-fluoro (2'-F) modified

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 2-3, 8-9, 11-13, 15, 19, 21, 23, and 27 are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:
(D) OTHER INFORMATION: T in position 28 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
CGGAAUCAGU GAAUGCUUUAU ACAUCCGT 28

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 28
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 1, 6-7, 10, 14, 16-18, 20, 22, and 24-26 are 2'-fluoro (2'-F) modified

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 2-3, 8-9, 11-13, 15, 19, 21, 23, and 27 are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:
(D) OTHER INFORMATION: T in position 28 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
CGGAAUCAGU GAAUGCUUUAU ACAUCCGT 28

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 28
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 1, 6-7, 10, 14, 16-18, 20, 22, and 24-26 are 2'-fluoro (2'-F) modified

(ix) FEATURE:
(D) OTHER INFORMATION: Nucleotides at positions 2-3, 8-9, 11-13, 15, 19, 21, 23, and 27 are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:
(D) OTHER INFORMATION: T in position 28 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
CGGAAUCAGU GAAUGCUUUAU ACAUCCGT 28

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 28
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: Nucleotides at positions 1, 6-7, 10, 14, 16-18, 20, 22, and 24-26 are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Nucleotides at positions 2-3, 8-9, 11-13, 15, 19, 21, 23, and 27 are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: T in position 28 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
CGGAAUCAGU GAAUGCUUUAU ACAUCCGT

28

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
GGGAGGACGA UGCGGNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNCAGAC
GACUCGCCCCG A

50

61

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
GGGAGGACGA UGCGGNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN
NNNNNCAGAC GACUCGCCCCG A

50

71

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
GGGAGGACGA UGCGGAAGAA UUGGUCAUCG UCGUCUCCGC CUCCCCAGAC
GACUCGCCCCG A

50

61

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
(B) TYPE: nucleic acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
GGGAGGACGA UGCGGAUAC GGAAGAAUUG GAUACAU AUG CUCGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 14:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
GGGAGGACGA UGCGGGAUAA CAGAAGAAUU GGUGAACAAAC GUGGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 15:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
GGGAGGACGA UGCGGAUGAU CGCGUAGGAA GUAUUGGAAG GCCCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 16:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
GGGAGGACGA UGCGGCACUU UAGAAGAAUU GAAUUUCCCCG CUGGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 17:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
GGGAGGACGA UGCGGUAGGA AGAAUUGGAA GCGCAUUUUC CUCGYCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 18:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
GGGAGGACGA UGCGGCGGGA UUUUGGAAGA AUUGGAUAAU GGCCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 19:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
GGGAGGACGA UGCGGCGGYA CUUUGGAAGA AUUGAAUUUC CCGCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 20:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
GGGAGGACGA UGCGGAAGAA UUGGAUAAU CGUUCACCCC CACCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 21:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
GGGAGGACGA UGCGGAAACG GAAGAAUUGG AUACGCAAGC ACGUUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 22:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
GGGAGGACGA UGCGGUAGGA AGUAUUGUAA GCGCCUCGUU UUCGCCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 23:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:
GGGAGGACGA UGCGGAGUUU UGGAAGAAU GGAUGUCCG AUCGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 24:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:
GGGAGGACGA UGCGGAAGAA ACGGAAGAAU UGGAGACACG CUCGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 25:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:
GGGAGGACGA UGCGGGAAGA AUUGAUGUUG UAUUGUCCUU CCGAUUUCCU 50
GCCGUCAGAC GACUCGCCCCG A 71

(2) INFORMATION FOR SEQ ID NO: 26:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 70
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:
GGGAGGACGA UGCGGACAGA AGAAUUGGGC UUCGCAUUU CCUCUGUCAG 50
CCGCCAGACG ACUCGCCCCG A 70

(2) INFORMATION FOR SEQ ID NO: 27:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:
GGGAGGACGA UGCGGUGAGA GAAACGGAAG AAUUGGAUAC GAUACUCAUC 50
GCGCUCAGAC GACUCGCCCCG A 71

(2) INFORMATION FOR SEQ ID NO: 28:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:
GGGAGGACGA UGCGGCUUAA GUUUUGGAAG AAUUGAAUAC UGGGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 29:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 60
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:

modified (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:
GGGAGGACGA UGCGGUAACC AGUGGAAGAA UUGGCUGCUA UCCUCAGACG 50
ACUCGCCCCGA 60

(2) INFORMATION FOR SEQ ID NO: 30:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 60
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:
GGGAGGACGA UGCGGAACGG AAGAAUUGGA UACGUAGCAU GCGUCAGACG 50
ACUCGCCCCGA 60

(2) INFORMATION FOR SEQ ID NO: 31:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:
GGGAGGACGA UGCGGCAGGA UUUUGGAAGA AUUGGAUAAU GGCCGCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 32:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:
GGGAGGACGA UGCGGAAACG GAAGAAUUGG AUACCGCUAC GUGUUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 33

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33
GGGAGGACGA UGCGGAAGAA UUGAGCAUUC CUUCUCCUUG UGCCUCAGAC 50
GACUCGCCCCG A 61

- (2) INFORMATION FOR SEQ ID NO: 34:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 61
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:
GGGAGGACGA UGCGGAGCUA ACGGAAGAAU UGGAAACAAC CGCGUCAGAC 50
GACUCGCCCCG A 61

- (2) INFORMATION FOR SEQ ID NO: 35:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 61
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35
GGGAGGACGA UGCGGYGAAC CGAUGGAAU UUUGGACGCU CGCCUCAGAC 50
GACUCGCCCCG A 61

- (2) INFORMATION FOR SEQ ID NO: 36:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 61
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:
GGGAGGACGA UGCGGAYCAA CCGAUUGACG UUAUGGGACG CUGGUCAGAC 50
GACUCGCCCCG A 61

- (2) INFORMATION FOR SEQ ID NO: 37:
- (i) SEQUENCE CHARACTERIZATION:
 - (A) LENGTH: 61
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULAR TYPE: RNA
 - (ix) FEATURE:
 - (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:
GGGAGGACGA UGCGGUAACC GAUUGAACUU CUUGGACGCU ACCGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 38:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 61
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:
GGGAGGACGA UGCGGUAACC GAAUUGAAGU UAUUGGACGC UACCUCAGAC 50
GACUCGCCCCG A 61

a
(2) INFORMATION FOR SEQ ID NO: 39:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:
GGGAGGACGA UGCGGGAGCA GAACCGAUAG AAGAAUUGGA CGCUCAGCUC 50
CGGGUCAGAC GACUCGCCCCG A 71

(2) INFORMATION FOR SEQ ID NO: 40:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 40:
GGGAGGACGA UGCGGGUACC AGAAUGAGCA ACCGAAUGAA GAACUGGACG 50
CUGCUCAGAC GACUCGCCCCG A 71

(2) INFORMATION FOR SEQ ID NO: 41:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 71
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 41:
GGGAGGACGA UGCGGUGAAC CGAUGGAAUC GCUUGGACGC UCAUCGCACG 50
UUGCUCAGAC GACUCGCCCCG A 71

(2) INFORMATION FOR SEQ ID NO: 42:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 42:
GGGAGGACGA UGCGGUCAAC CGGUUGAAUA UUUGGUCGCU GACCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 43:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 43:
GGGAGGACGA UGCGGAACUA GUGA AUGCUU AUACGACCGU GUUGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 44:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 60
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 44:
GGGAGGACGA UGCGGAUCAG UGAAUGCUUA UAGACCGCCU CCGUCAGACG 50
ACUCGCCCCG A 60

(2) INFORMATION FOR SEQ ID NO: 45:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 45:

GGGAGGACGA UGCGGAGAAU CAGUGAAUGC UUAUAAAUCU CGYGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 46:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 62
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 46:
GGGAGGACGA UGCGGAAUCA GUGAAGCUU AUAGCUCCCCG CGUCCUCAGA 50
CGACUCGCCG GA 62

(2) INFORMATION FOR SEQ ID NO: 47:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 60
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:
GGGAGGACGA UGCGGAACCA GUGAAGCUU AUAAGACUGC UCGUCAGACG 50
ACUCGCCCGA 60

(2) INFORMATION FOR SEQ ID NO: 48:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 48:
GGGAGGACGA UGCGGAUCAG UGAAUGCUUA UAGACCGUAU UGCGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 49:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 49:
GGGAGGACGA UGCGGAGAAU CAGUGAAUGC UUAUAAACCU CGUGUCAGAC 50

(2) INFORMATION FOR SEQ ID NO: 50:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 50:

GGGAGGACGA UGCGGAAUCA GUGAUGCUU AUAGCUCCGC GUGGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 51:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

GGGAGGACGA UGCGGACCAG UGAAUGCUUA UAAGCCCAUC GACCUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 52:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 60
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

GGGAGGACGA UGCGGCAGGG UGAAUGCCAA UGUACUUUUC GCGUCAGACG 50
ACUCGCCCCG A 60

(2) INFORMATION FOR SEQ ID NO: 53:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

GGGAGGACGA UGCGGAAUCA GUGAUGCUU AUACAUCCGC UCGGUCAGAC 50
GACUCGCCCCG A 61

(2) INFORMATION FOR SEQ ID NO: 54:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 61
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:
GGGAGGACGA UGCGGGACUA GGUGAAGCC AAUAUUCUUC UCCGUCAGAC
GACUCGCCCCG A

50
61

(2) INFORMATION FOR SEQ ID NO: 55:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 30
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: N at position 30 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:
GACGAUGC GG UAGGAAGAAU UGGAAGCGCN

30

(2) INFORMATION FOR SEQ ID NO: 56:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 28
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 56:
GACGAUGC GG UAGGAAGAAU UGGAAGCG

28

(2) INFORMATION FOR SEQ ID NO: 57:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 28
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: C in position 28 is 2'-OH C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 57:

84

(2) INFORMATION FOR SEQ ID NO: 58:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 23
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(ix) FEATURE:

- (D) OTHER INFORMATION: C in position 23 is 2'-OH C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

GCGGUAGGAA GAAUUGGAAG CGC

23

(2) INFORMATION FOR SEQ ID NO: 59:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 22
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(ix) FEATURE:

- (D) OTHER INFORMATION: C in position 22 is 2'-OH C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

CGGUAGGAAG AAUUGGAAGC GC

22

(2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 22
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(ix) FEATURE:

- (D) OTHER INFORMATION: N at position 22 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

GGUAGGAAGA AUUGGAAGCG CN

22

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 21
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

- (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified

(ix) FEATURE:
(D) OTHER INFORMATION: N at position 21 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:
GUAGGAAGAA UUGGAAGCGCN 21

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 32
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: N at position 32 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:
GGCGAACCGA UGGAAUUUUU GGACGCUCGC CN 32

(2) INFORMATION FOR SEQ ID NO: 63:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 29
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: C in position 29 is 2'-OH C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 63:
GCGAACCGAU GGAAUUUUUG GACGCUCGC 29

(2) INFORMATION FOR SEQ ID NO: 64:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 27
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 64:
CGAACCGAUG GAAUUUUUGG ACGCUCG 27

(2) INFORMATION FOR SEQ ID NO: 65:

(i) SEQUENCE CHARACTERIZATION:

- (A) LENGTH: 26
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: N at position 26 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 65:
GAACCGAUGG AAUUUUUGGA CGCUCN 26

(2) INFORMATION FOR SEQ ID NO: 66:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 24
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: N at position 24 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 66:
AACCGAUGGA AUUUUUUGGAC GCUN 24

(2) INFORMATION FOR SEQ ID NO: 67:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 22
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: N at position 22 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 67:
ACCGAUGGAA UUUUUUGGACG CN 22

(2) INFORMATION FOR SEQ ID NO: 68:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 30
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: N at position 30 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 68:
GCGGAUUCAG UGAAUGCUUA UACAUCGCGN 30

(2) INFORMATION FOR SEQ ID NO: 69:
(i) SEQUENCE CHARACTERIZATION:
 (A) LENGTH: 27
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
 (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:
CGGAAUCAGU GAAUGCUUUAU ACAUCCG 27

a (2) INFORMATION FOR SEQ ID NO: 70:
(i) SEQUENCE CHARACTERIZATION:
 (A) LENGTH: 25
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
 (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
 (D) OTHER INFORMATION: C in position 25 is 2'-OH C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 70:
GGAAUCAGUG AAUGCUUUAU CAUCC 25

(2) INFORMATION FOR SEQ ID NO: 71:
(i) SEQUENCE CHARACTERIZATION:
 (A) LENGTH: 24
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
 (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
 (D) OTHER INFORMATION: N at position 24 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 71:
GAAUCAGUGA AUGCUUAUAC AUCN 24

(2) INFORMATION FOR SEQ ID NO: 72:
(i) SEQUENCE CHARACTERIZATION:
 (A) LENGTH: 22
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
 (D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
 (D) OTHER INFORMATION: N at position 22 is a 3'-3'-linked
deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 72:
AAUCAGUGAA UGCUUAUACA UN 22

(2) INFORMATION FOR SEQ ID NO: 73:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 20
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: N at position 20 is a 3'-3'-linked deoxythymidine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 73:
AUCAGUGAAU GCUUAUACAN 20

(2) INFORMATION FOR SEQ ID NO: 74:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: G in position 10, A in position 12, and G in position 22 are unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 74:
GACGAUGC GG UAGGAAGAAU UGGAAGCGC 29

(2) INFORMATION FOR SEQ ID NO: 75:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: G in position 10 and A in position 12 are unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 75:
GACGAUGC GG UAGGAAGAAU UGGAAGCGC 29

(2) INFORMATION FOR SEQ ID NO: 76:

- (i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29

(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
(ix) FEATURE:
(D) OTHER INFORMATION: G in positions 10 and 22 is unmodified
(i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 76:
GACGAUGC GG UAGGAAGAAU UGGAAGCGC 29

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
(ix) FEATURE:
(D) OTHER INFORMATION: A in position 12 and G in position 22
are unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 77:
GACGAUGC GG UAGGAAGAAU UGGAAGCGC 29

(2) INFORMATION FOR SEQ ID NO: 78:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 31
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
(ix) FEATURE:
(D) OTHER INFORMATION: A in position 6 and G in position 21 are
unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:
GGCGAACCGA UGGAUUUUUU GGACGCUCGC C 31

(2) INFORMATION FOR SEQ ID NO: 79:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 31
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified
(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
(ix) FEATURE:
(D) OTHER INFORMATION: A in position 6 is unmodified (i.e., 2'-
OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:
GGCGAACCGA UGGAAUUUUU GGACGCUCGC C 31

(2) INFORMATION FOR SEQ ID NO: 80:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 31
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:
(D) OTHER INFORMATION: G in position 21 is unmodified (i.e.,
2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:
GGCGAACCGA UGGAAUUUUU GGACGCUCGC C 31

(2) INFORMATION FOR SEQ ID NO: 81:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:
(D) OTHER INFORMATION: A in positions 5 and 6 is unmodified
(i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:
GCGGAUCAG UGAAUGCUUA UACAUCGCG 29

(2) INFORMATION FOR SEQ ID NO: 82:

(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)
modified

(ix) FEATURE:

(ix) (D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
FEATURE:
(D) OTHER INFORMATION: A in position 5 is unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:
GCGGAAUCAG UGAAUGCUUA UACAUCGCG 29

(2) INFORMATION FOR SEQ ID NO: 83:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: A in position 6 is unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:
GCGGAAUCAG UGAAUGCUUA UACAUCGCG 29

(2) INFORMATION FOR SEQ ID NO: 84:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 23
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: G in position 4 and A in position 6 are unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:
GCGGUAGGAA GAAUUGGAAG CGC 23

(2) INFORMATION FOR SEQ ID NO: 85:

(i) SEQUENCE CHARACTERIZATION:

(A) LENGTH: 29
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULAR TYPE: RNA

(ix) FEATURE:

(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F) modified

(ix) FEATURE:

(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified

(ix) FEATURE:

(D) OTHER INFORMATION: A in position 5 and G in position 20 are

unmodified (i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:
GCGAACCGAU GGAAUUUUUG GACGCUCGC 29

(2) INFORMATION FOR SEQ ID NO: 86:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 27
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION: All pyrimidines are 2'-fluoro (2'-F)

modified
(ix) FEATURE:
(D) OTHER INFORMATION: Purines are 2'-OMethyl (2'-OMe) modified
(ix) FEATURE:
(D) OTHER INFORMATION: A in positions 4 and 5 is unmodified
(i.e., 2'-OH)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 86:
GGGAUCAGU GAAUGCUUUAU ACAUCCG 27

Al
Cancel
(2) INFORMATION FOR SEQ ID NO: 87:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 13
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:
GCCTTAGTCA CTT 13

(2) INFORMATION FOR SEQ ID NO: 88:
(i) SEQUENCE CHARACTERIZATION:
(A) LENGTH: 14
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULAR TYPE: RNA
(ix) FEATURE:
(D) OTHER INFORMATION:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:
CGGATGTATA AGCA 14